SANTA CRUZ BIOTECHNOLOGY, INC.

PCDHGC4 (L-14): sc-109842

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Protocadherins are a large family of cadherin-like cell adhesion proteins that are involved in the establishment and maintenance of neuronal connections in the brain. There are three protocadherin gene clusters, designated α, β and γ, all of which contain multiple tandemly-arranged genes. PCDHGC4 (protocadherin γ subfamily C, 4) is a 938 amino acid single-pass type I membrane protein that localizes to the cell membrane and contains six cadherin domains. Expressed as two alternatively spliced isoforms, PCDHGC4 functions as a potential calcium-dependent cell adhesion protein that is thought to be involved in the establishment and maintenance of neuronal connections within the brain. The gene encoding PCDHGC4 maps to a protocadherin γ gene cluster, which is localized to chromosome 5 and contains over 22 protocadherin genes.

REFERENCES

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4. Wu, Q. and Maniatis, T. 2000. Large exons encoding multiple ectodomains are a characteristic feature of protocadherin genes. Proc. Natl. Acad. Sci. USA 97: 3124-3129.
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7. Abe, M., Watanabe, N., McDonell, N., Takato, T., Ohira, M., Nakagawara, A. and Ushijima, T. 2008. Identification of genes targeted by CpG island methylator phenotype in neuroblastomas, and their possible integrative involvement in poor prognosis. Oncology 74: 50-60.

CHROMOSOMAL LOCATION

Genetic locus: PCDHGC4 (human) mapping to 5q31.3; Pcdhgc4 (mouse) mapping to 18 B3.

SOURCE

PCDHGC4 (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of PCDHGC4 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109842 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PCDHGC4 (L-14) is recommended for detection of PCDHGC4 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other PCDHGC family members.

Suitable for use as control antibody for PCDHGC4 siRNA (h): sc-106954, PCDHGC4 siRNA (m): sc-152103, PCDHGC4 shRNA Plasmid (h): sc-106954-SH, PCDHGC4 shRNA Plasmid (m): sc-152103-SH, PCDHGC4 shRNA (h) Lentiviral Particles: sc-106954-V and Pcdhgc4 shRNA (m) Lentiviral Particles: sc-152103-V.

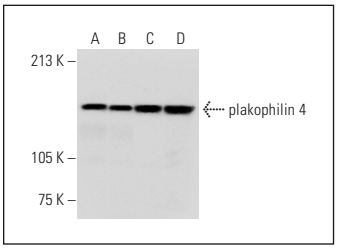
Molecular Weight of PCDHGC4: 101 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Raji whole cell lysate: sc-364236 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



plakophilin 4 (S-18): sc-26098. Western blot analysis of plakophilin 4 expression in HeLa (**A**), Hep G2 (**B**), Jurkat (**C**) and K-562 (**D**) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.